

Preliminary Regional Analysis of Fish Consumption Rate Estimates for Rural Alaska Populations

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Brief review of methodology

ADF&G Division of Subsistence collects information on harvest and use patterns through questions on household surveys pertaining to the amounts of resources harvested by the household and, regardless of any household harvest, if a household used, gave away, or received a resource. Survey designs take the form of either comprehensive (including all resource categories: salmon, non-salmon fish, marine invertebrates, land mammals, marine mammals, and vegetation) or targeted surveys (i.e. salmon only). Depending on community size, a 70 -100% sample achievement is often sought and attained.

Communities surveyed by ADF&G Division of Subsistence, representing 2008-2014 harvest (study) years, were considered for inclusion in this preliminary analysis. A total of 108 communities, representing all six regions of Alaska were included in the analysis (refer to Appendix A and C for map of regions and communities, respectively). All salmon, non-marine-non-salmon fish, marine invertebrate, and marine mammal harvest and use information was selected from community survey data when available and any resource harvested for dog food was removed prior to analysis.

At the species level, outliers were identified as being two standard deviations from the mean community consumption estimate rate and a consumption rate estimate of twice the upper limit of the suggested daily intake of fish/protein (340.2 grams per day). Outliers not reporting resource sharing were adjusted to reflect sharing of the resource in effort to reflect the availability of that resource to other households within the community. In special cases whereby an outlier was identified but households using the resource in the community was below that of the number of households the harvesting household reported sharing with (as reflected in field notes) the harvest was removed from the community total under the assumption that the majority of the harvest was likely shared outside of the community.

Computation of percentiles was done based on previous work between ADF&G Division of Subsistence and DEC for the development of wild food consumption rate estimates (see Wolfe & Utermohle, 2000). Briefly, the method to determine percentiles of fish consumption involves creating three user groups within each community at the species level: 1) households that harvested a resource and did not share; 2) households that harvested a resource and shared with others or households that did not harvest a resource and received from others; 3) households that did not use the resource. For households harvesting and not sharing, use level per person is computed by dividing total household harvest by total household size, assuming all harvest was consumed equally by all residents of the household. Use level per person for households in user group two, constituting the sharing group, was

computed by summing all household harvests of those households that harvested and shared and dividing it by the sum of all households who gave or received the resource under the assumption that all harvests were shared within the community and consumed equally by all individuals of households reporting use of the resource. Households reporting no use of the resource received a use level of zero. Use levels for each species were then summed based on the analysis of interest (i.e. inclusion/exclusion of marine mammals), which was rank ordered and the percentile rank occupant of interest (75th, 85th, 90th, and 95th) was identified.

Table 1. Sum total salmon, non-marine fish, and marine invertebrate per capita consumption comparisons, Alaska.

Area	Fish Consumption Estimates Per Capita (grams per day)											
	Consumers and non-consumers						Consumers only					
	Mean	Median	Percentiles				Mean	Median	Percentiles			
			75th	85th	90th	95th			75th	85th	90th	95th
Statewide												
Urban	8.9	-	-	-	-	-	-	-	-	-	-	-
Rural/Subsistence	134.3	104.2	191.2	253.3	299.2	372.3	150.7	119.4	209.8	268.8	318.2	404.4
Southeast	123.3	81.7	169.8	244.9	299.5	337.4	127.8	85.7	181.5	248.1	301.7	339.8
Southcentral	95.6	74.4	133.0	173.0	204.0	264.8	107.1	85.2	141.7	184.6	229.0	309.8
Southwest	180.5	167.9	242.6	286.5	313.3	376.9	188.4	171.6	243.4	287.3	314.8	376.9
Western	179.3	146.6	245.7	320.2	367.9	439.9	187.6	151.9	255.8	325.0	374.8	446.2
Arctic	119.3	86.2	176.8	253.3	293.1	362.9	146.8	104.5	208.8	277.8	314.4	392.4
Interior	117.3	105.0	171.3	221.0	246.3	319.6	137.3	120.9	188.0	242.3	294.0	431.0

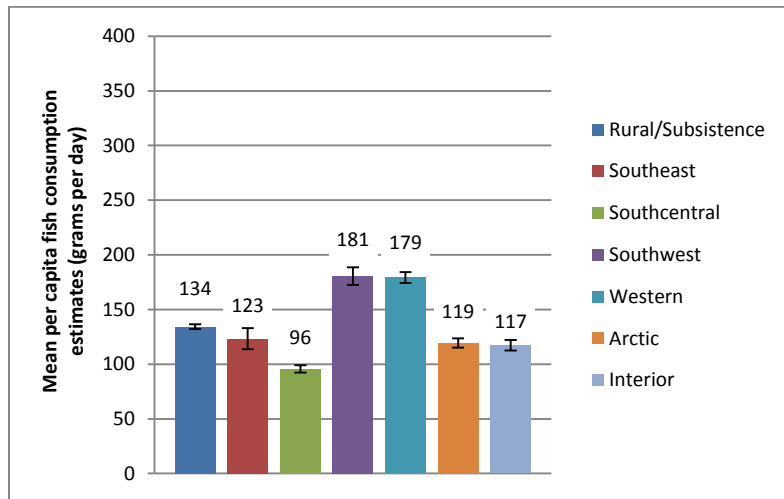


Figure 1. Mean fish consumption rate comparisons for all consumer groups by region including salmon, non-marine fish, and marine invertebrates.

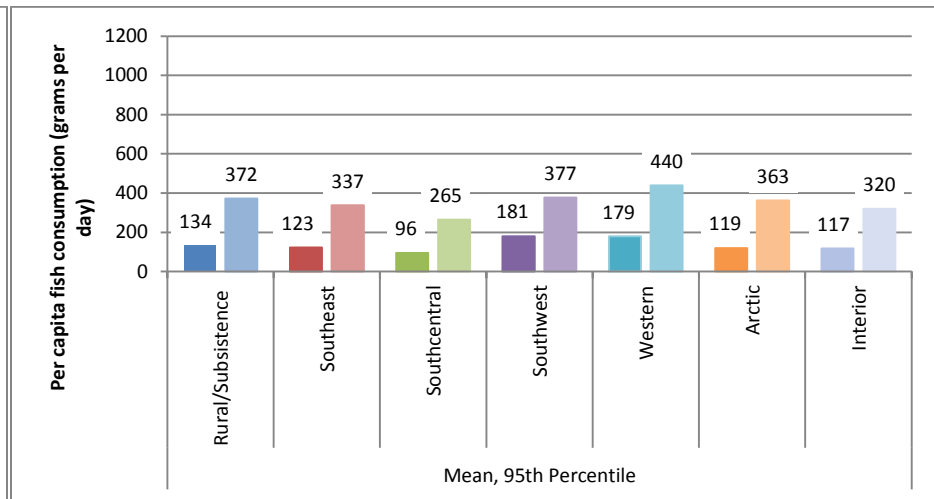


Figure 2. Mean and 95th percentile fish consumption rate comparisons for all consumer groups by region including salmon, non-marine fish, and marine invertebrates.

Table 2. Sum total salmon, non-salmon fish, marine invertebrate, and marine mammal (excluding bowhead) per capita consumption comparisons, Alaska

Area	Fish Consumption Estimates Per Capita (grams per day)											
	Consumers and non-consumers						Consumers only					
	Mean	Median	Percentiles				Mean	Median	Percentiles			
			75th	85th	90th	95th			75th	85th	90th	95th
Statewide												
Urban	8.9	-	-	-	-	-	-	-	-	-	-	-
Rural/Subsistence	156.0	123.1	230.4	304.2	349.7	425.6	174.6	140.2	249.6	325.7	370.9	467.5
Southeast	129.5	84.1	194.5	250.6	304.7	349.8	134.2	86.1	200.0	257.9	306.3	361.7
Southcentral	98.4	74.5	135.1	177.5	211.2	292.1	110.1	85.8	142.3	192.9	236.6	328.3
Southwest	181.1	167.9	243.4	287.3	314.8	378.1	189.0	171.6	244.9	287.3	315.0	378.1
Western	206.5	169.2	298.1	371.0	421.7	510.1	215.6	175.4	307.2	378.5	429.0	518.4
Arctic	171.4	141.6	283.6	342.9	374.6	454.4	209.4	178.5	315.4	363.5	402.6	495.1
Interior	117.3	105.0	171.3	221.0	246.3	319.6	137.3	120.9	189.4	244.4	300.3	467.5

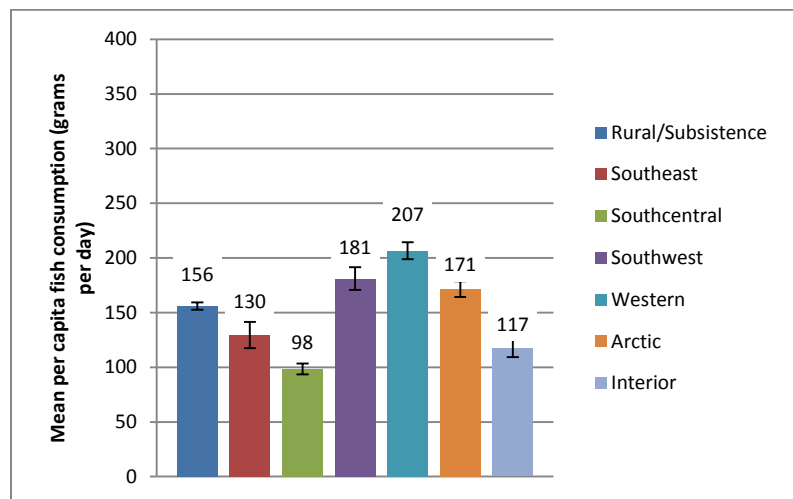


Figure 3. Mean fish consumption rate comparisons for all consumer groups by region including salmon, non-marine fish, marine invertebrates, and marine mammals (excluding bowhead).

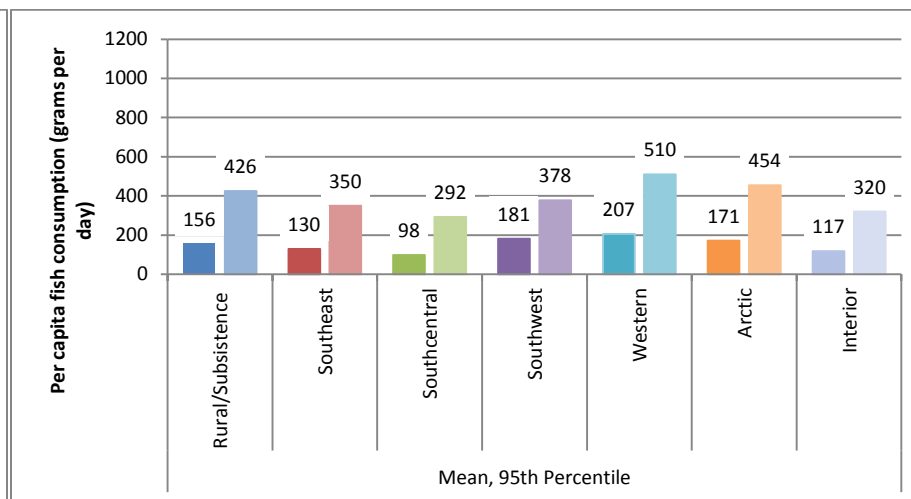


Figure 4. Mean and 95th percentile fish consumption rate comparisons for all consumer groups by region including salmon, non-marine fish, marine invertebrates, and marine mammals (excluding bowhead).

Table 3. Sum total salmon, non-salmon fish, marine invertebrate, and marine mammal per capita consumption comparisons, Alaska

Area	Fish Consumption Estimates Per Capita (grams per day)											
	Consumers and non-consumers						Consumers only					
	Mean	Median	Percentiles				Mean	Median	Percentiles			
			75th	85th	90th	95th			75th	85th	90th	95th
Statewide												
Urban	8.9	-	-	-	-	-	-	-	-	-	-	-
Rural/Subsistence	197.0	127.4	242.5	336.6	423.5	753.8	219.9	143.0	265.7	369.0	483.3	917.2
Southeast	129.5	84.1	194.5	250.6	304.7	349.8	134.2	86.1	200.0	257.9	306.3	361.7
Southcentral	98.4	74.5	135.1	177.5	211.2	292.1	110.1	85.8	142.3	192.9	236.6	328.3
Southwest	181.1	167.9	243.4	287.3	314.8	378.1	189.0	171.6	244.9	287.3	315.0	378.1
Western	206.5	169.2	298.1	371.0	421.7	510.1	215.6	175.4	307.2	378.5	429.0	518.4
Arctic	319.4	162.6	397.6	842.6	1036.1	1199.2	386.2	212.9	561.8	980.2	1135.0	1253.1
Interior	117.3	105.0	171.3	221.0	246.3	319.6	137.3	120.9	189.4	244.4	300.3	467.5

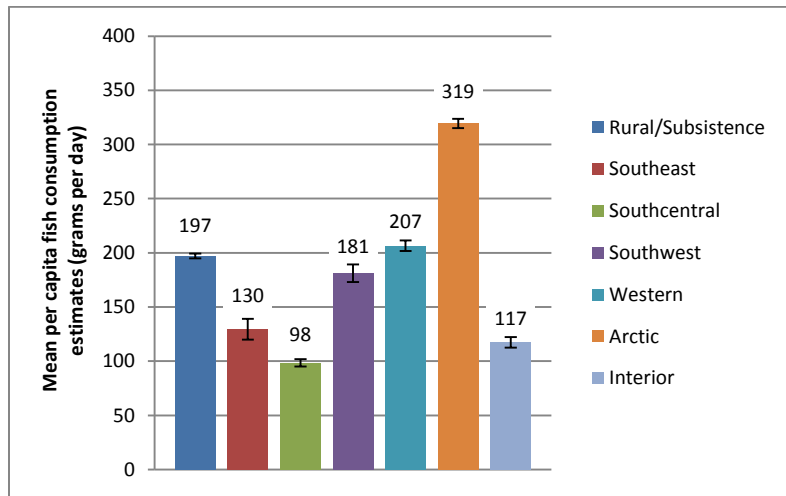


Figure 5. Mean fish consumption rate comparisons for all consumer groups by region including salmon, non-marine fish, marine invertebrates, and marine mammals.

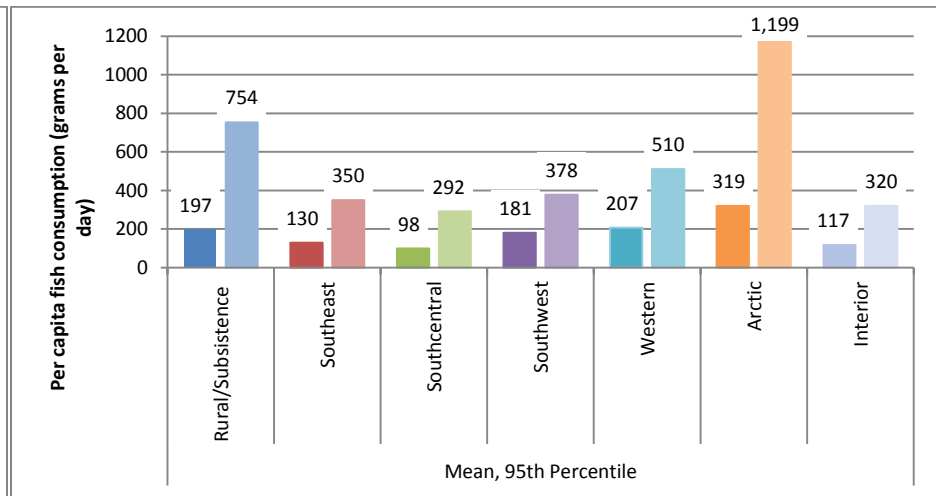


Figure 6. Mean and 95th percentile fish consumption rate comparisons for all consumer groups by region including salmon, non-marine fish, marine invertebrates, and marine mammals.

Table 4. Sum total salmon, non-marine fish, halibut, herring, and marine invertebrate per capita consumption comparisons, Alaska.

Area	Fish Consumption Estimates Per Capita (grams per day)											
	Consumers and non-consumers						Consumers only					
	Mean	Median	Percentiles				Mean	Median	Percentiles			
			75th	85th	90th	95th			75th	85th	90th	95th
Statewide												
Urban	8.9	-	-	-	-	-	-	-	-	-	-	-
Rural/Subsistence	143.0	113.5	207.7	266.9	313.5	383.2	159.5	128.1	226.3	288.3	329.7	417.3
Southeast	175.5	139.6	248.1	320.5	344.3	425.4	181.4	143.6	254.2	320.8	349.0	427.8
Southcentral	107.4	91.1	142.2	187.2	227.8	296.6	118.5	98.8	151.5	200.3	248.6	334.6
Southwest	186.2	171.0	253.3	290.8	328.2	378.1	193.7	177.2	254.7	292.9	327.8	376.9
Western	185.7	153.9	256.4	322.5	374.8	445.6	194.1	163.9	261.5	328.9	382.8	457.5
Arctic	123.0	86.3	178.5	265.8	307.7	367.3	150.6	105.9	222.3	293.9	326.9	398.1
Interior	118.3	106.0	171.3	221.5	246.4	319.6	137.3	120.3	187.5	241.0	291.3	424.5

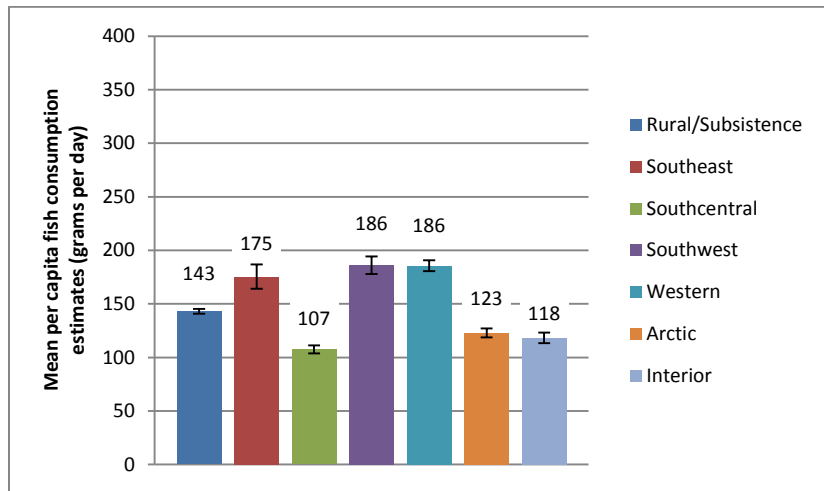


Figure 7. Mean fish consumption rate comparisons for all consumer groups by region including salmon, non-marine fish, halibut, herring, and marine invertebrates.

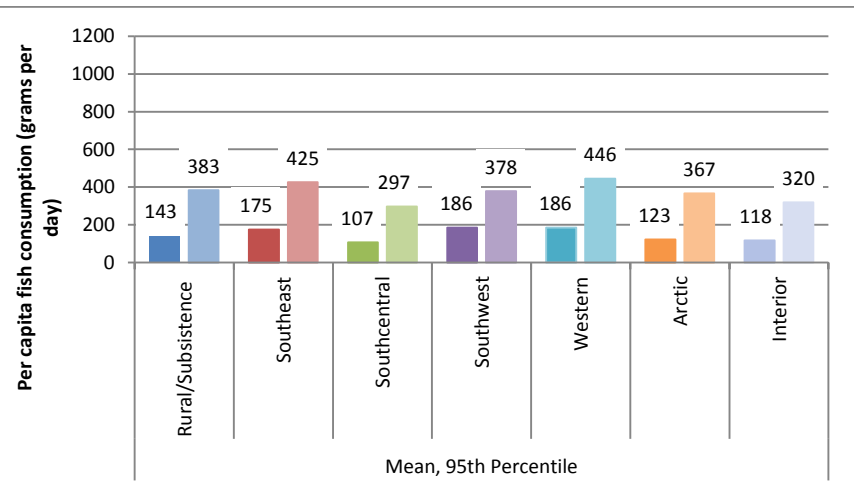


Figure 8. Mean and 95th percentile fish consumption rate comparisons for all consumer groups by region including salmon, non-marine fish, halibut, herring, and marine invertebrates.

Table 5. Sum total salmon, non-marine fish, halibut, herring, marine invertebrate, seals and sea lions per capita consumption comparisons, Alaska

Area	Fish Consumption Estimates Per Capita (grams per day)											
	Consumers and non-consumers						Consumers only					
	Mean	Median	Percentiles				Mean	Median	Percentiles			
			75th	85th	90th	95th			75th	85th	90th	95th
Statewide												
Urban	8.9	-	-	-	-	-	-	-	-	-	-	-
Rural/Subsistence	156.6	128.8	229.6	295.9	338.8	420.9	174.3	143.1	245.6	311.0	362.7	448.4
Southeast	181.6	143.6	274.6	322.2	364.7	434.8	187.8	148.5	279.5	322.5	368.8	447.2
Southcentral	109.5	92.5	143.2	190.4	234.8	313.5	120.7	99.3	153.5	210.3	257.0	341.7
Southwest	186.2	171.0	253.3	290.8	328.2	378.1	193.7	177.2	254.7	292.9	327.8	376.9
Western	201.3	165.7	295.1	357.0	409.9	494.3	210.0	173.6	300.7	366.8	416.8	502.6
Arctic	155.9	132.9	242.3	306.5	353.8	421.5	190.2	167.1	268.5	330.6	378.4	461.7
Interior	118.3	106.0	171.3	221.5	246.4	319.6	137.3	120.3	187.8	242.4	297.0	431.0

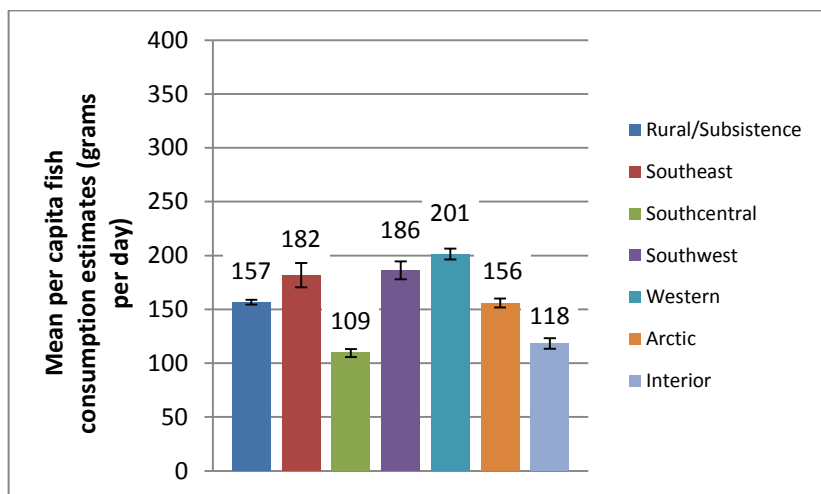


Figure 9. Mean fish consumption rate comparisons for all consumer groups by region including salmon, non-marine fish, halibut, herring, marine invertebrates, seals, and sea lions.

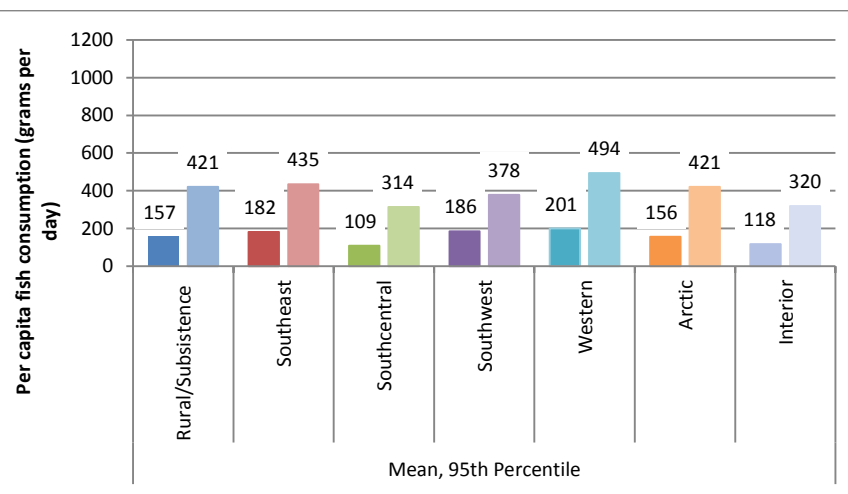
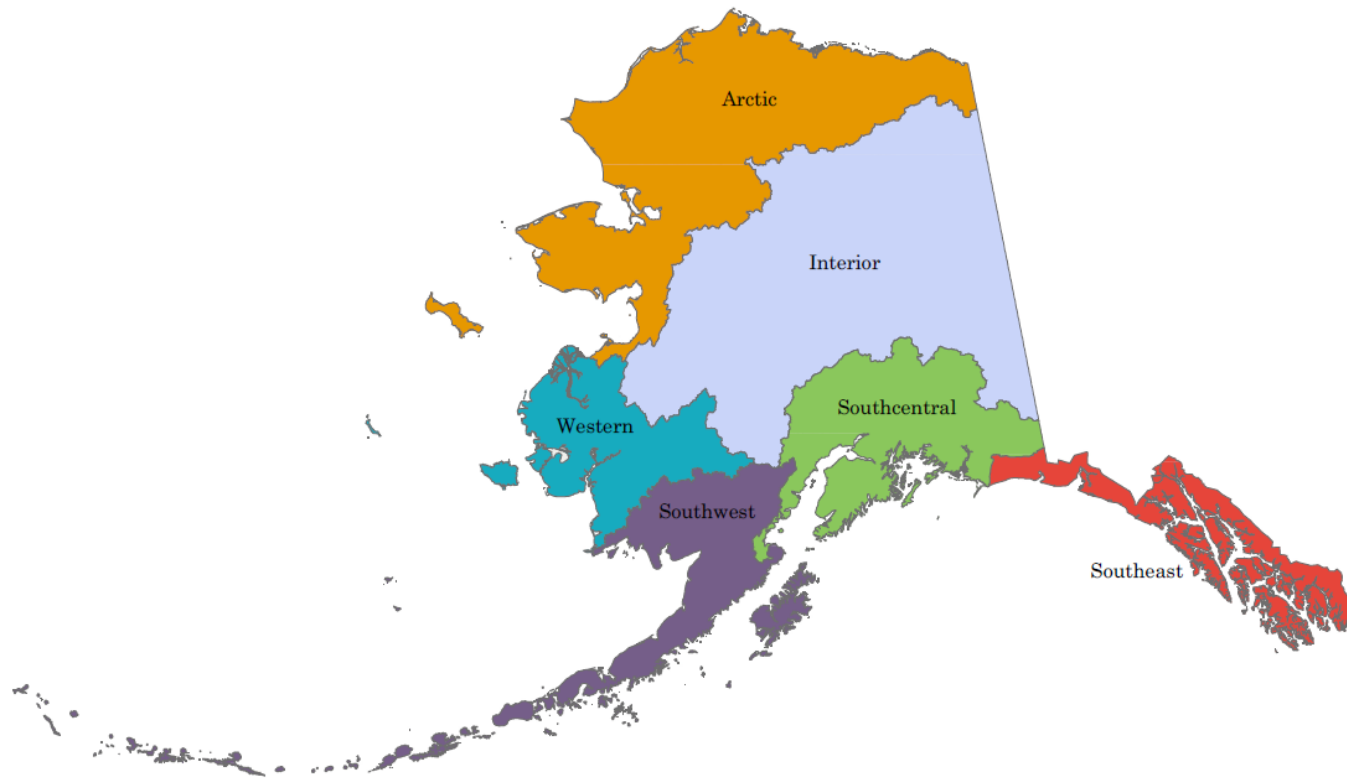


Figure 10. Mean and 95th percentile fish consumption rate comparisons for all consumer groups by region including salmon, non-marine fish, halibut, herring, marine invertebrates, seals, and sea lions.

Appendix A

Figure A1. Map of Alaska regions applied in analysis.



Appendix B

Table B1. Ethnic composition of survey participants by region.

Region	% AK Native population surveyed	% AK Native population consumers
Southeast	55.1%	56.0%
Southcentral	32.1%	33.1%
Southwest	84.8%	85.5%
Western	90.2%	90.8%
Arctic	87.6%	90.9%
Interior	68.8%	70.2%

Appendix C

Table C1. Southeast study communities.

Community	Study year	Sampled		Estimated		Average household size	% AK Native population	Study type
		Households	Population	Households	Population			
Angoon	2012	51	143	122.0	342.1	2.80	89.5%	Comprehensive
Haines	2012	132	310	818.0	1921.1	2.35	16.0%	Comprehensive
Hoonah	2012	122	319	280.0	732.1	2.61	63.9%	Comprehensive
Hydaburg	2012	48	134	119.0	332.2	2.79	92.5%	Comprehensive
Klukwan	2014	24	48	32.0	64.0	2.00	91.7%	Comprehensive
Whale Pass	2012	21	43	27.0	55.3	2.05	0.0%	Comprehensive

Table C2. Southcentral study communities.

Community	Study year	Sampled		Estimated		Average household size	% AK Native population	Study type
		Households	Population	Households	Population			
Cantwell	2012	55	130	83.0	196.2	2.36	17.7%	Comprehensive
Chase	2012	16	31	18.0	34.9	1.94	0.0%	Comprehensive
Chenega	2014	12	25	17.0	35.4	2.08	64.0%	Comprehensive
Chistochina	2009	27	71	33.0	86.8	5.26	64.8%	Comprehensive
Chitina	2012	46	114	54.0	133.8	2.48	42.1%	Comprehensive
Copper Center	2010	80	218	158.0	430.6	2.73	39.4%	Comprehensive
Cordova	2014	184	504	950.0	2602.2	2.74	15.9%	Comprehensive
Nanwalek	2014	56	223	58.0	231.0	3.98	91.9%	Comprehensive
Gakona	2012	42	110	77.0	201.7	2.62	21.1%	Comprehensive
Glennallen	2013	77	211	140.0	383.6	2.74	17.8%	Comprehensive
Gulkana	2013	29	91	33.0	103.6	3.14	70.0%	Comprehensive
Kenny Lake	2012	67	164	174	417	2.73	12.2%	Comprehensive
Lake Louise	2013	10	19	14.0	26.6	1.90	0.0%	Comprehensive
McCarthy Road	2012	39	69	58.0	102.6	1.77	1.4%	Comprehensive
Mendeltna	2013	10	24	14.0	33.6	2.40	0.0%	Comprehensive
Mentasta Lake	2010	23	68	36.0	106.4	2.96	92.1%	Comprehensive
Mentasta Pass	2010	9	26	12.0	34.7	2.89	23.1%	Comprehensive
Nelchina	2013	18	47	29.0	75.7	2.61	8.5%	Comprehensive
Paxson	2013	8	23	11.0	31.6	2.88	0.0%	Comprehensive
Port Graham	2014	41	105	58.0	148.5	2.56	89.5%	Comprehensive
Seldovia	2014	95	208	127.0	278.1	2.19	23.1%	Comprehensive
Skwentna	2012	30	53	35.0	61.8	1.77	3.8%	Comprehensive
Slana	2010	62	127	86.0	176.2	2.05	16.5%	Comprehensive
Susitna	2012	11	20	13.0	23.6	1.82	10.0%	Comprehensive
Talkeetna	2012	102	215	374.0	788.3	2.11	3.7%	Comprehensive
Tatitlek	2014	21	58	27.0	74.6	2.76	87.9%	Comprehensive
Tazlina	2013	79	232	120.0	352.4	2.94	39.2%	Comprehensive
Tolsona	2013	8	16	12.0	24.0	2.00	0.0%	Comprehensive
Tonsina	2013	23	53	39.0	89.9	2.30	11.3%	Comprehensive
Trapper Creek	2012	69	156	148.0	334.6	2.29	5.8%	Comprehensive
Tyonek	2013	49	111	63.0	142.7	2.27	95.5%	Comprehensive

Table C3. Southwest study communities.

Community	Study year	Sampled		Estimated		Average household size	% AK Native population	Study type
		Households	Population	Households	Population			
Akutan	2008	36	74	40.0	82.2	2.06	80.6%	Comprehensive
Chignik Bay	2014	25	64	30.0	76.8	2.56	60.3%	Salmon only
Chignik Lagoon	2014	16	45	25.0	70.3	2.81	73.6%	Salmon only
Chignik Lake	2014	19	55	26.0	75.3	2.89	98.6%	Salmon only
Clarks Point	2014	13	27	15.0	31.2	2.08	96.3%	Salmon only
Dillingham	2014	200	595	997	2902	2.98	64.0%	Salmon only
Egegik	2014	20	57	25.0	71.3	2.85	70.2%	Comprehensive
Ekwok	2014	30	84	36.0	100.8	2.80	94.0%	Salmon only
Koliganek	2014	51	168	60.0	197.6	3.29	95.2%	Salmon only
New Stuyahok	2014	101	464	112.0	514.5	4.59	97.2%	Salmon only
Perryville	2014	34	99	39.0	113.6	2.91	97.5%	Salmon only
Pilot Point	2014	17	47	23.0	63.6	2.76	84.8%	Comprehensive
Togiak	2008	80	341	188.0	801.4	4.26	94.1%	Comprehensive
Ugashik	2014	4	5	7.0	8.8	1.25	60.0%	Comprehensive

Table C4. Western study communities.

Community	Study year	Sampled		Estimated		Average household size	% AK Native population	Study type
		Households	Population	Households	Population			
Akiak	2010	63	273	89.0	385.7	4.33	88.7%	Comprehensive
Bethel	2012	466	1,607	1645.0	5672.8	3.45	71.1%	Comprehensive
Eek	2013	64	247	90.0	347.3	3.86	97.2%	Comprehensive
Emmonak	2008	109	480	179.0	788.3	4.40	97.9%	Comprehensive
Kwethluk	2010	93	428	155.0	713.3	4.60	98.1%	Comprehensive
Marshall	2010	46	185	85.0	341.8	4.02	98.9%	Comprehensive
Mountain Village	2010	115	499	181.0	785.4	4.34	95.2%	Comprehensive
Napakiak	2011	56	199	89.0	316.3	3.55	95.4%	Comprehensive
Napaskiak	2011	56	280	96.0	480.0	5.00	96.1%	Comprehensive
Oscarville	2010	12	54	14.0	63.0	4.50	98.1%	Comprehensive
Pilot Station	2013	94	460	128.0	626.4	4.89	96.7%	Comprehensive
Quinhagak	2013	109	493	162.0	732.7	4.52	99.2%	Comprehensive
Russian Mission	2011	46	234	79.0	401.9	5.09	95.7%	Comprehensive
Scammon Bay	2013	86	439	123.0	627.9	5.10	97.3%	Comprehensive
Tuluksak	2010	68	360	86.0	455.3	5.29	99.2%	Comprehensive
Tuntutuliak	2013	67	266	104.0	412.9	3.97	97.7%	Comprehensive

Table C5. Arctic study communities.

Community	Study year	Sampled		Estimated		Average household size	% AK Native population	Study type
		Households	Population	Households	Population			
Ambler	2014	55	202	74.0	271.8	3.67	97.3%	Fish only
Barrow	2014	259	869	1584.0	5314.7	3.35	67.0%	Comprehensive
Buckland	2014	90	475	98.0	517.2	5.26	99.2%	Fish only
Deering	2013	32	93	44.0	127.9	1.57	94.1%	Comprehensive
Diomedes	2013	25	51	39.0	79.6	1.24	93.0%	Comprehensive
Golovin	2012	33	101	59.0	180.6	3.06	85.1%	Comprehensive
Kiana	2014	73	295	98.0	396.0	4.07	97.3%	Fish only
Kobuk	2014	28	128	33.0	150.9	4.57	92.5%	Fish only
Kotzebue	2014	214	773	826.0	2983.6	3.61	77.4%	Comprehensive
Noatak	2014	106	469	125.0	553.1	4.42	97.6%	Fish only
Noorvik	2014	96	427	124.0	551.5	4.45	98.8%	Fish only
Nuiqsut	2014	58	223	108.0	415.2	3.89	96.0%	Comprehensive
Point Hope	2014	105	439	176.0	735.8	4.18	97.5%	Comprehensive
Point Lay	2014	40	177	63.0	278.8	4.43	88.3%	Fish only
Selawik	2014	161	692	183.0	786.6	4.30	97.2%	Fish only
Shishmaref	2014	86	379	140.0	617.0	4.41	96.3%	Comprehensive
Shungnak	2014	43	177	62.0	255.2	4.12	94.9%	Fish only
Stebbins	2013	87	369	135.0	572.6	3.64	95.8%	Comprehensive
Wainwright	2014	75	292	145.0	564.5	3.89	97.3%	Fish only

Table C6. Interior study communities.

Community	Study year	Sampled		Estimated		Average household size	% AK Native population	Study type
		Households	Population	Households	Population			
Alatna	2011	6	21	9.0	31.5	3.50	100.0%	Comprehensive
Anvik	2011	24	66	32.0	88.0	2.75	95.5%	Comprehensive
Beaver	2011	25	50	36.0	72.0	2.00	100.0%	Comprehensive
Bettles	2011	8	12	8.0	12.0	1.50	0.0%	Comprehensive
Coldfoot	2011	4	8	5.0	10.0	2.00	0.0%	Comprehensive
Evansville	2011	13	20	13.0	20.0	1.54	45.0%	Comprehensive
Galena	2010	80	215	158.0	424.6	2.69	68.4%	Comprehensive
Grayling	2011	41	158	55.0	212.0	3.85	96.8%	Comprehensive
Healy	2014	127	349	366.0	1005.8	2.75	2.6%	Comprehensive
Hughes	2014	26	69	34.0	90.2	2.65	100.0%	Comprehensive
Manley Hot Springs	2012	41	87	58.0	123.1	2.12	23.0%	Comprehensive
McGrath	2011	108	271	142.0	356.3	2.51	59.0%	Comprehensive
Minto	2012	46	133	61.0	176.4	2.89	95.5%	Comprehensive
Nikolai	2011	26	78	39.0	117.0	3.00	91.0%	Comprehensive
Northway	2014	55	146	73.0	193.8	2.65	87.7%	Comprehensive
Nulato	2010	84	243	90.0	260.4	2.89	96.7%	Comprehensive
Rampart	2014	7	21	13.0	39.0	3.00	100.0%	Comprehensive
Ruby city	2010	47	128	66.0	179.7	2.72	82.8%	Comprehensive
Shageluk	2013	26	76	29.0	84.8	2.92	97.4%	Comprehensive
Stevens Village	2014	4	10	4.0	10.0	2.50	100.0%	Comprehensive
Takotna	2011	14	33	22.0	51.9	2.36	51.5%	Comprehensive
Tanana	2014	66	148	91.0	204.1	2.24	88.5%	Comprehensive
Wiseman	2011	5	13	5.0	13.0	2.60	0.0%	Comprehensive

Appendix D

Table D1. Harvest and use characteristics by species, Southeast, Alaska.

Resource	Used	Attempted	Harvested	Received	Gave away	Per capita (gpd)
Salmon	92.5%	66.3%	63.6%	67.3%	52.3%	88.7
Chum salmon	26.6%	20.1%	19.1%	10.1%	11.8%	6.2
Coho salmon	57.5%	43.0%	41.0%	28.4%	29.6%	20.3
Chinook salmon	68.3%	41.7%	37.2%	42.2%	26.9%	11.7
Pink salmon	25.9%	21.9%	21.4%	7.0%	8.3%	5.3
Sockeye salmon	70.9%	43.5%	40.7%	46.5%	36.7%	45.1
Salmon roe	6.9%	2.8%	0.0%	6.9%	2.8%	0.0
Unknown salmon	4.0%	0.8%	0.3%	4.0%	1.0%	0.1
Non-marine fish	30.9%	26.4%	25.4%	8.5%	7.5%	4.8
Pacific herring	23.9%	18.1%	17.8%	9.3%	8.5%	6.6
Pacific halibut	81.2%	43.2%	37.9%	58.5%	37.2%	45.6
Char	2.6%	1.9%	1.9%	0.6%	0.6%	0.1
Dolly Varden	22.9%	20.1%	19.3%	5.8%	5.8%	3.6
Arctic grayling	1.5%	0.8%	0.8%	0.8%	0.8%	0.1
Cutthroat trout	6.7%	7.0%	6.1%	1.3%	1.9%	0.7
Rainbow trout	7.1%	5.5%	5.3%	2.5%	1.3%	0.3
Steelhead	6.5%	4.8%	4.0%	2.8%	2.3%	0.1
Unknown trout	0.8%	0.8%	0.8%	0.0%	0.0%	0.0
Unknown whitefishes	0.6%	0.0%	0.0%	0.6%	0.0%	0.0
Marine mammals	21.4%	8.0%	7.5%	17.3%	9.8%	6.2
Fur seal	0.0%	0.0%	0.0%	0.0%	0.0%	0.0
Harbor seal	19.8%	7.0%	6.5%	16.4%	8.8%	5.6
Unknown seal	1.5%	0.0%	0.0%	1.5%	0.0%	0.0
Sea otter	2.5%	2.0%	2.0%	0.8%	1.3%	0.6
Steller sea lion	0.5%	0.5%	0.0%	0.5%	0.3%	0.0
Marine invertebrates	79.9%	47.2%	46.7%	63.6%	36.9%	29.9
Abalone	2.5%	1.8%	1.5%	1.3%	1.0%	0.2
Chitons (bidarkis, gumboots)	8.3%	0.0%	0.0%	8.3%	0.0%	0.0
Red (large) chitons	3.0%	2.3%	2.0%	2.0%	1.8%	0.5
Black (small) chitons	18.3%	13.3%	12.6%	9.3%	9.8%	2.2
Unknown chitons	0.8%	0.0%	0.0%	0.8%	0.0%	0.0
Butter clams	23.1%	15.3%	15.3%	11.6%	11.8%	3.4
Horse clams	1.5%	1.0%	1.0%	0.5%	0.3%	0.1
Pacific littleneck clams (steamers)	13.1%	9.1%	9.1%	6.3%	5.3%	1.0
Pinkneck clams	5.7%	5.7%	5.7%	0.8%	4.1%	0.5
Razor clams	1.3%	1.3%	1.0%	0.8%	0.8%	0.1
Unknown clams	1.5%	0.8%	0.8%	0.8%	0.3%	0.1
Basket cockles	27.2%	17.6%	17.6%	15.9%	13.7%	4.6
Heart cockles	6.0%	4.0%	4.0%	3.0%	3.0%	1.2
Unknown cockles	2.9%	2.9%	2.3%	1.7%	2.3%	0.1

- Continued -

Table D1, continued. Harvest and use characteristics by species, Southeast, Alaska.

Resource	Used	Attempted	Harvested	Received	Gave away	Per capita (gpd)
Dungeness crab	63.8%	31.7%	31.7%	47.2%	22.6%	4.9
Blue king crab	0.5%	0.3%	0.3%	0.5%	0.5%	0.0
Brown king crab	2.0%	0.8%	0.8%	1.5%	0.8%	0.1
Red king crab	17.1%	5.8%	5.5%	14.6%	6.0%	1.1
Unknown tanner crab	5.8%	3.3%	3.3%	3.3%	2.8%	0.1
Geoducks	1.5%	0.8%	0.8%	0.8%	0.0%	0.0
Limpets	0.3%	0.3%	0.3%	0.0%	0.0%	0.0
Unknown mussels	2.0%	1.5%	1.5%	0.8%	0.5%	0.1
Octopus	7.3%	4.5%	4.5%	3.8%	2.8%	0.8
Weathervane scallops	0.8%	0.3%	0.3%	0.5%	0.0%	0.1
Rock scallops	2.0%	1.3%	1.3%	1.0%	0.5%	0.1
Unknown scallops	0.8%	0.0%	0.0%	0.8%	0.0%	0.0
Sea cucumber	4.0%	3.3%	3.3%	1.0%	1.0%	0.7
Green sea urchin	0.8%	0.8%	0.8%	0.0%	0.0%	0.0
Red sea urchin	1.3%	0.8%	0.8%	0.5%	0.5%	0.0
Purple sea urchin	1.0%	0.8%	0.5%	0.5%	0.3%	0.0
Shrimp	38.9%	18.3%	18.3%	27.6%	12.6%	7.7
Squid	0.8%	0.0%	0.0%	0.8%	0.0%	0.0

Table D2. Harvest and use characteristics by species, Southcentral, Alaska.

Resource	Used	Attempted	Harvested	Received	Gave away	Per capita (gpd)
Salmon	88.7%	63.6%	59.3%	64.5%	49.1%	82.3
Chum salmon	8.7%	6.9%	6.4%	3.8%	3.5%	1.7
Coho salmon	44.5%	33.3%	29.8%	23.0%	18.1%	13.7
Chinook salmon	49.5%	36.4%	29.3%	30.7%	21.7%	12.5
Pink salmon	13.8%	11.5%	11.0%	6.1%	5.7%	4.1
Sockeye salmon	77.4%	51.1%	47.2%	51.8%	41.2%	50.3
Landlocked salmon	1.4%	1.6%	1.1%	0.3%	0.4%	0.1
Spawning sockeye salmon	0.0%	0.0%	0.0%	0.0%	0.0%	0.0
Unknown salmon	2.9%	0.6%	0.5%	2.2%	0.4%	0.0
Non-marine fish	40.7%	36.6%	33.9%	15.8%	13.1%	9.9
Pacific herring	2.7%	1.4%	1.2%	1.8%	0.8%	0.3
Pacific halibut	53.5%	22.8%	20.6%	41.2%	18.8%	11.5
Char	1.4%	1.4%	1.4%	0.0%	0.0%	0.0
Brook trout	4.3%	4.3%	4.3%	0.0%	4.3%	0.0
Dolly Varden	12.6%	12.9%	11.1%	3.9%	4.4%	4.2
Lake trout	10.2%	10.4%	9.1%	2.3%	2.9%	1.3
Arctic grayling	18.7%	17.3%	15.7%	4.9%	5.4%	1.1
Northern pike	4.0%	3.3%	3.0%	1.6%	1.1%	0.8
Sheefish	1.4%	0.5%	0.0%	1.4%	0.0%	0.0
Unknown sturgeon	0.0%	0.0%	0.0%	0.0%	0.0%	0.0
Longnose sucker	0.8%	0.9%	0.5%	0.3%	0.1%	0.1
Cutthroat trout	1.3%	1.2%	1.0%	0.4%	0.2%	0.1
Rainbow trout	15.8%	16.0%	14.2%	4.2%	3.6%	1.3
Steelhead	2.1%	1.6%	1.6%	0.7%	0.4%	0.0
Unknown trout	1.7%	2.1%	1.1%	0.7%	0.5%	0.0
Broad whitefish	1.1%	1.0%	0.9%	0.6%	0.3%	0.3
Least cisco	0.5%	0.6%	0.5%	0.1%	0.1%	0.1
Humpback whitefish	3.7%	3.2%	2.7%	1.8%	1.1%	0.3
Lake whitefish	0.5%	0.5%	0.0%	0.5%	0.0%	0.0
Round whitefish	4.4%	3.2%	2.8%	1.9%	1.4%	0.2
Unknown whitefishes	2.5%	1.2%	0.9%	2.0%	0.6%	0.1
Unknown nonsalmon fish	1.8%	1.2%	1.2%	0.6%	0.0%	0.0
Marine mammals	13.2%	4.1%	3.0%	12.1%	3.9%	2.7
Bearded seal	6.3%	0.0%	0.0%	6.3%	0.0%	0.0
Fur seal	0.0%	0.0%	0.0%	0.0%	0.0%	0.0
Harbor seal	9.9%	3.7%	2.7%	8.7%	3.4%	1.9
Ringed seal	1.0%	0.0%	0.0%	1.0%	0.0%	0.0
Unknown seal	2.0%	0.2%	0.0%	2.0%	0.2%	0.0
Sea otter	0.8%	0.5%	0.5%	0.3%	0.2%	0.2
Steller sea lion	2.9%	1.1%	0.8%	2.3%	1.2%	0.7
Walrus	10.0%	0.0%	0.0%	10.0%	0.0%	0.0
Beluga whale	10.2%	1.7%	0.0%	10.2%	1.7%	0.0
Bowhead whale	2.1%	0.0%	0.0%	2.1%	0.0%	0.0
Humpback whale	1.8%	0.0%	0.0%	1.8%	0.0%	0.0
Unknown whale	1.7%	0.0%	0.0%	1.7%	0.4%	0.0

- Continued -

Table D2. Harvest and use characteristics by species, Southcentral, Alaska.

Resource	Used	Attempted	Harvested	Received	Gave away	Per capita (gpd)
Marine invertebrates	27.4%	17.1%	16.2%	19.9%	11.0%	3.4
Red (large) chitons	3.7%	2.9%	2.9%	2.0%	1.5%	0.0
Black (small) chitons	22.5%	18.6%	18.6%	12.0%	12.7%	0.4
Unknown chitons	1.3%	0.0%	0.0%	1.3%	0.0%	0.0
Butter clams	12.6%	8.3%	8.1%	6.9%	3.7%	0.3
Freshwater clams	0.3%	0.2%	0.1%	0.2%	0.1%	0.0
Horse clams	0.7%	0.7%	0.7%	0.0%	0.2%	0.0
Pacific littleneck clams (steamers)	7.6%	6.1%	5.9%	2.6%	2.0%	0.2
Pinkneck clams	0.2%	0.2%	0.2%	0.0%	0.2%	0.0
Razor clams	6.8%	3.3%	2.9%	4.4%	1.6%	0.7
Softshell clams	1.5%	1.5%	1.5%	0.0%	0.0%	0.0
Unknown clams	1.1%	0.6%	0.5%	0.7%	0.1%	0.0
Cockles	2.2%	1.1%	1.1%	1.1%	0.0%	0.0
Unknown cockles	2.0%	2.0%	1.7%	0.4%	0.4%	0.0
Dungeness crab	2.4%	0.6%	0.5%	2.1%	0.5%	0.2
King crab	2.7%	0.5%	0.4%	2.4%	0.6%	0.2
Tanner crab, bairdi	14.9%	6.5%	6.2%	11.8%	4.7%	0.0
Unknown tanner crab	1.4%	0.4%	0.4%	1.1%	0.3%	0.1
Unknown crab	0.6%	0.2%	0.2%	0.6%	0.0%	0.0
Geoducks	1.1%	0.0%	0.0%	1.1%	0.0%	0.0
Limpets	2.0%	2.0%	2.0%	0.2%	0.7%	0.0
Blue mussels	1.0%	0.0%	0.0%	1.0%	0.0%	0.0
Unknown mussels	7.4%	6.2%	6.2%	2.9%	2.1%	0.1
Octopus	7.6%	4.3%	4.1%	5.4%	3.4%	0.8
Oyster	11.1%	0.0%	0.0%	11.1%	0.0%	0.0
Unknown oyster	1.3%	0.4%	0.4%	0.9%	0.2%	0.0
Weathervane scallops	0.2%	0.0%	0.0%	0.2%	0.2%	0.0
Rock scallops	2.4%	2.4%	2.4%	0.0%	0.0%	0.0
Unknown scallops	1.4%	0.0%	0.0%	1.4%	0.0%	0.0
Unknown sea cucumber	0.5%	0.2%	0.2%	0.2%	0.0%	0.0
Unknown sea urchin	0.8%	0.6%	0.6%	0.4%	0.0%	0.0
Shrimp	8.4%	3.3%	3.1%	6.2%	2.0%	0.4
Snails	10.5%	7.8%	7.8%	5.4%	6.1%	0.1
Squid	0.0%	0.0%	0.0%	0.0%	0.0%	0.0
Whelk	0.0%	0.0%	0.0%	0.0%	0.0%	0.0
Unknown marine invertebrates	1.3%	0.0%	0.0%	1.3%	0.0%	0.0

Table D3. Harvest and use characteristics by species, Southwest, Alaska.

Resource	Used	Attempted	Harvested	Received	Gave away	Per capita (gpd)
Salmon	95.2%	74.4%	70.4%	72.4%	66.2%	174.3
Chum salmon	38.5%	32.1%	29.0%	15.2%	19.4%	13.6
Coho salmon	63.9%	51.3%	48.4%	32.9%	36.7%	33.9
Chinook salmon	76.4%	55.8%	49.5%	49.1%	46.4%	64.8
Pink salmon	24.5%	18.9%	17.5%	12.3%	12.0%	5.7
Sockeye salmon	82.6%	58.1%	53.1%	52.5%	46.4%	52.3
Spawning coho salmon	5.9%	0.0%	0.0%	5.9%	0.0%	0.0
Spawning sockeye salmon	23.4%	15.6%	14.5%	12.7%	10.4%	4.1
Unknown salmon	0.2%	0.0%	0.0%	0.2%	0.0%	0.0
Non-marine fish	64.3%	50.3%	48.4%	39.5%	33.1%	4.3
Pacific herring	17.8%	10.2%	8.3%	11.5%	7.6%	2.2
Pacific halibut	41.4%	21.0%	16.6%	31.8%	17.2%	3.4
Dolly Varden	59.2%	47.1%	45.2%	33.8%	28.7%	3.5
Lake trout	7.8%	6.9%	4.3%	4.3%	1.8%	0.0
Arctic grayling	10.2%	7.0%	4.5%	7.1%	1.9%	0.0
Northern pike	32.2%	21.5%	18.2%	20.7%	14.5%	0.8
Rainbow trout	20.7%	17.4%	14.9%	6.6%	5.9%	0.1
Steelhead	0.0%	0.0%	0.0%	0.0%	0.0%	0.0
Unknown trout	4.1%	4.1%	1.7%	2.5%	0.8%	0.0
Least cisco	16.5%	12.4%	9.1%	9.9%	3.4%	0.0
Humpback whitefish	5.8%	4.1%	0.0%	5.8%	0.0%	0.0
Round whitefish	4.1%	3.3%	0.0%	4.1%	0.9%	0.0
Unknown whitefishes	5.9%	0.0%	0.0%	5.9%	0.0%	0.0
Unknown nonsalmon fish	0.0%	0.0%	0.0%	0.0%	0.0%	0.0
Marine mammals	63.7%	36.3%	30.6%	63.1%	38.2%	0.5
Harbor porpoise	1.7%	0.8%	0.8%	0.8%	0.8%	0.0
Seal	3.8%	1.3%	0.0%	3.8%	1.3%	0.0
Bearded seal	5.0%	6.3%	2.5%	3.8%	2.5%	0.0
Fur seal	19.3%	10.5%	10.5%	19.3%	14.0%	0.0
Fur seal (other)	0.0%	0.0%	0.0%	0.0%	0.0%	0.0
Harbor seal	64.0%	37.5%	32.4%	62.5%	40.3%	0.0
Harbor seal (unknown)	0.0%	5.0%	0.0%	0.0%	0.0%	0.0
Ribbon seal	0.0%	0.0%	0.0%	0.0%	0.0%	0.0
Ringed seal	6.3%	3.8%	3.8%	2.5%	3.8%	0.0
Unknown seal	4.9%	0.0%	0.0%	4.9%	0.0%	0.0
Sea otter	1.3%	0.0%	0.0%	1.3%	0.0%	0.0
Steller sea lion	11.5%	2.6%	1.9%	11.5%	2.6%	0.0
Walrus	18.5%	4.5%	2.5%	16.6%	5.8%	0.0
Beluga whale	9.8%	4.9%	2.4%	7.3%	2.4%	0.5
Unknown whale	2.8%	0.0%	0.0%	2.8%	0.0%	0.0

- Continued -

Table D3, continued. Harvest and use characteristics by species, Southwest, Alaska.

Resource	Used	Attempted	Harvested	Received	Gave away	Per capita (gpd)
Marine invertebrates	70.1%	43.3%	38.2%	51.0%	33.8%	1.9
Chitons (bidarkis, gumboots)	25.0%	25.0%	25.0%	0.0%	0.0%	0.0
Red (large) chitons	5.0%	3.3%	3.3%	3.3%	3.3%	0.0
Black (small) chitons	19.5%	10.4%	10.4%	14.3%	6.5%	0.2
Butter clams	3.9%	1.3%	1.3%	2.6%	2.6%	0.0
Horse clams	1.9%	1.9%	1.9%	1.9%	0.0%	0.0
Pacific littleneck clams (steamers)	2.6%	2.6%	2.6%	0.0%	1.3%	0.0
Razor clams	5.7%	5.7%	5.7%	0.0%	1.9%	0.2
Softshell clams	5.0%	3.3%	3.3%	1.7%	1.7%	0.1
Unknown clams	5.8%	0.8%	0.0%	5.8%	1.7%	0.0
Cockles	42.7%	25.5%	22.9%	32.5%	21.6%	1.4
Dungeness crab	3.2%	1.3%	0.0%	3.2%	0.6%	0.0
Hair crab	0.0%	2.8%	0.0%	0.0%	0.0%	0.0
King crab	13.0%	3.9%	1.3%	13.0%	2.6%	0.0
Red king crab	0.8%	0.0%	0.0%	0.8%	0.0%	0.0
Tanner crab, bairdi	2.8%	5.6%	0.0%	2.8%	0.0%	0.0
Tanner crab, opillio	16.7%	2.8%	0.0%	16.7%	8.3%	0.0
Unknown tanner crab	0.8%	0.8%	0.8%	0.0%	0.0%	0.0
Rock jingles	0.0%	0.0%	0.0%	0.0%	0.0%	0.0
Limpets	0.0%	0.0%	0.0%	0.0%	0.0%	0.0
Blue mussels	1.9%	1.3%	1.3%	1.3%	0.6%	0.0
Brown mussels	0.0%	0.0%	0.0%	0.0%	0.0%	0.0
Unknown mussels	0.0%	0.0%	0.0%	0.0%	0.0%	0.0
Octopus	23.4%	9.1%	7.8%	22.1%	13.0%	0.0
Unknown scallops	1.3%	1.3%	1.3%	0.0%	0.0%	0.0
Sea anemone	0.0%	0.0%	0.0%	0.0%	0.0%	0.0
Sea cucumber	0.0%	0.0%	0.0%	0.0%	0.0%	0.0
Sea urchin	14.7%	10.7%	9.3%	10.7%	5.3%	0.0
Shrimp	0.0%	0.0%	0.0%	0.0%	0.0%	0.0
Snails	0.0%	0.0%	0.0%	0.0%	0.0%	0.0
Squid	0.0%	0.0%	0.0%	0.0%	0.0%	0.0
Whelk	0.0%	0.0%	0.0%	0.0%	0.0%	0.0

Table D4. Harvest and use characteristics by species, Western, Alaska.

Resource	Used	Attempted	Harvested	Received	Gave away	Per capita (gpd)
Salmon	94.0%	62.8%	61.2%	60.8%	48.5%	129.1
Chum salmon	70.8%	50.5%	48.5%	34.9%	33.2%	49.1
Coho salmon	54.9%	37.0%	35.2%	26.3%	21.5%	21.0
Chinook salmon	76.6%	52.5%	49.9%	41.5%	32.4%	38.0
Pink salmon	10.1%	8.3%	7.6%	3.7%	2.8%	1.3
Sockeye salmon	47.9%	35.2%	34.0%	19.5%	20.2%	19.5
Unknown salmon	2.8%	0.6%	0.5%	2.6%	0.5%	0.2
Non-marine fish	78.5%	58.9%	57.2%	50.3%	35.4%	50.0
Pacific herring	13.9%	3.5%	3.4%	10.8%	3.1%	2.5
Pacific halibut	24.5%	6.4%	6.1%	20.0%	5.2%	3.9
Char	10.7%	9.2%	8.9%	4.2%	4.1%	2.6
Brook trout	1.5%	1.5%	1.5%	0.0%	0.0%	0.0
Dolly Varden	11.2%	9.5%	8.9%	3.6%	3.0%	3.2
Lake trout	0.5%	0.4%	0.4%	0.2%	0.2%	0.1
Unknown char	1.8%	0.9%	0.9%	0.9%	0.9%	0.1
Arctic grayling	9.4%	8.3%	8.0%	2.1%	2.8%	0.2
Northern pike	46.4%	37.8%	35.6%	16.4%	17.9%	15.1
Sheefish	32.7%	22.2%	20.6%	17.0%	12.0%	10.9
Sturgeon	1.1%	1.1%	1.1%	0.0%	0.0%	0.0
Longnose sucker	0.3%	0.3%	0.2%	0.1%	0.2%	0.0
Rainbow trout	9.1%	6.6%	6.3%	3.4%	2.2%	0.3
Unknown trout	0.7%	0.5%	0.5%	0.2%	0.2%	0.0
Broad whitefish	44.0%	26.8%	25.7%	24.5%	16.0%	7.4
Bering cisco	19.0%	12.4%	11.5%	10.3%	7.3%	1.6
Least cisco	12.8%	8.8%	8.1%	6.3%	5.0%	0.5
Unknown cisco	0.7%	0.5%	0.5%	0.2%	0.2%	0.0
Humpback whitefish	43.9%	29.2%	27.8%	22.6%	16.2%	7.5
Round whitefish	6.6%	3.9%	3.4%	4.0%	2.1%	0.2
Unknown whitefishes	2.9%	1.0%	0.9%	2.4%	0.2%	0.1
Unknown nonsalmon fish	0.8%	0.0%	0.0%	0.8%	0.0%	0.0
Marine mammals	59.0%	18.4%	13.7%	54.1%	19.2%	27.3
Harbor porpoise	0.0%	0.0%	0.0%	0.0%	0.0%	0.0
Unknown porpoise	0.0%	1.1%	0.0%	0.0%	0.0%	0.0
Bearded seal	22.4%	13.1%	8.9%	15.5%	10.3%	11.6
Harbor seal	0.8%	0.6%	0.2%	0.6%	0.4%	0.1
Ribbon seal	2.5%	3.8%	1.5%	1.3%	1.3%	0.1
Ringed seal	15.5%	10.2%	7.5%	9.3%	7.0%	3.6
Unknown seal oil	33.5%	1.5%	0.0%	33.5%	3.3%	0.0
Unknown seal	36.6%	3.1%	0.7%	36.2%	6.6%	0.1
Steller sea lion	0.0%	0.0%	0.0%	0.0%	0.0%	0.0
Walrus	12.3%	2.6%	1.4%	11.2%	2.9%	3.1
Beluga whale	19.5%	5.3%	3.0%	17.6%	5.3%	8.6
Bowhead whale	5.2%	0.0%	0.0%	5.2%	0.6%	0.0
Common minke whale	0.2%	0.0%	0.0%	0.2%	0.2%	0.0
Unknown marine mammals	0.7%	0.0%	0.0%	0.7%	0.0%	0.0

- Continued -

Table D4, continued. Harvest and use characteristics by species, Western, Alaska.

Resource	Used	Attempted	Harvested	Received	Gave away	Per capita (gpd)
Marine invertebrates	8.3%	4.8%	4.6%	5.0%	2.3%	0.2
Butter clams	0.0%	0.0%	0.0%	0.0%	0.0%	0.0
Freshwater clams	2.4%	2.4%	2.4%	0.5%	0.5%	0.0
Razor clams	0.5%	0.0%	0.0%	0.5%	0.0%	0.0
Unknown clams	5.7%	3.5%	3.3%	3.1%	1.7%	0.1
Cockles	0.3%	0.2%	0.2%	0.2%	0.2%	0.0
Dungeness crab	0.6%	0.2%	0.2%	0.5%	0.0%	0.0
King crab	1.1%	0.1%	0.0%	1.1%	0.1%	0.0
Blue king crab	0.2%	0.0%	0.0%	0.2%	0.0%	0.0
Red king crab	1.8%	1.8%	1.8%	0.0%	0.9%	0.0
Unknown tanner crab	0.1%	0.1%	0.0%	0.1%	0.0%	0.0
Unknown crab	0.2%	0.1%	0.1%	0.1%	0.1%	0.0
Blue mussels	0.0%	0.0%	0.0%	0.0%	0.0%	0.0
Unknown mussels	3.1%	2.3%	2.3%	1.2%	0.9%	0.0
Octopus	2.2%	0.0%	0.0%	2.2%	0.0%	0.0
Unknown scallops	0.2%	0.0%	0.0%	0.2%	0.0%	0.0
Shrimp	0.6%	0.3%	0.3%	0.5%	0.1%	0.0
Snails	2.1%	1.1%	1.1%	1.1%	0.0%	0.0
Unknown marine invertebrates	0.3%	0.2%	0.2%	0.1%	0.1%	0.0

Table D5. Harvest and use characteristics by species, Arctic, Alaska.

Resource	Used	Attempted	Harvested	Received	Gave away	Per capita (gpd)
Salmon	70.8%	40.9%	38.9%	54.8%	33.9%	52.9
Chum salmon	54.0%	33.4%	32.0%	38.7%	27.4%	37.9
Coho salmon	21.5%	13.2%	12.3%	13.2%	10.2%	8.5
Chinook salmon	11.6%	6.8%	6.0%	7.0%	3.5%	1.0
Pink salmon	15.9%	11.3%	9.5%	9.3%	6.8%	3.3
Sockeye salmon	12.5%	5.2%	4.8%	8.9%	4.0%	2.1
Spawning pink salmon	1.1%	1.1%	1.1%	0.0%	1.1%	0.0
Unknown salmon	3.9%	0.8%	0.7%	3.5%	0.9%	0.1
Non-marine fish	71.0%	47.9%	45.8%	56.7%	39.3%	64.9
Pacific herring	11.3%	7.5%	7.2%	6.4%	5.6%	3.3
Pacific halibut	5.8%	1.3%	1.2%	4.7%	1.9%	0.3
Char	6.3%	4.1%	3.7%	3.8%	3.2%	0.5
Dolly Varden	26.0%	17.5%	16.9%	16.8%	10.8%	7.7
Lake trout	4.0%	1.3%	1.1%	3.2%	1.7%	0.1
Arctic grayling	21.6%	12.9%	11.9%	13.2%	8.6%	2.0
Northern pike	13.1%	10.6%	9.4%	6.4%	5.6%	6.1
Sheefish	42.1%	25.3%	24.1%	30.6%	17.5%	12.7
Longnose sucker	0.7%	0.7%	0.0%	0.7%	0.0%	0.0
Rainbow trout	0.5%	0.5%	0.5%	0.0%	0.0%	0.0
Unknown trout	2.5%	2.5%	2.5%	0.0%	0.0%	0.0
Broad whitefish	34.5%	18.4%	16.9%	25.1%	15.2%	24.2
Arctic cisco	24.9%	7.9%	7.2%	20.5%	13.0%	3.4
Bering cisco	5.9%	3.1%	2.9%	3.8%	1.9%	0.4
Least cisco	11.0%	7.9%	6.7%	6.3%	5.2%	1.3
Unknown cisco	0.9%	0.9%	0.9%	0.0%	0.6%	0.0
Humpback whitefish	14.7%	9.8%	9.1%	9.4%	7.4%	6.5
Round whitefish	2.6%	1.6%	1.3%	1.8%	1.2%	0.1
Unknown whitefishes	2.4%	0.6%	0.6%	1.9%	0.6%	0.1
Unknown nonsalmon fish	0.7%	0.7%	0.2%	0.5%	0.5%	0.0
Marine mammals	66.9%	29.1%	19.9%	64.8%	40.0%	200.1
Polar bear	6.7%	2.4%	0.8%	6.1%	2.4%	0.7
Bearded seal	47.3%	22.7%	15.3%	37.5%	26.8%	27.3
Ribbon seal	0.9%	1.3%	0.0%	0.9%	0.1%	0.0
Ringed seal	19.3%	12.4%	9.8%	12.3%	13.0%	4.9
Unknown seal	13.6%	0.2%	0.1%	13.5%	2.0%	0.0
Sea otter	0.5%	0.0%	0.0%	0.5%	0.0%	0.0
Walrus	20.4%	7.4%	2.6%	18.4%	9.2%	8.1
Beluga whale	32.4%	9.3%	2.9%	31.4%	14.5%	11.0
Bowhead whale	48.9%	13.9%	0.3%	48.8%	26.7%	148.0
Gray whale	7.3%	0.3%	0.0%	7.3%	0.7%	0.0
Killer whale	1.2%	0.0%	0.0%	1.2%	0.0%	0.0

- Continued -

Table D5, continued. Harvest and use characteristics by species, Arctic, Alaska.

Resource	Used	Attempted	Harvested	Received	Gave away	Per capita (gpd)
Marine invertebrates	20.9%	8.1%	7.6%	16.0%	6.5%	1.5
Butter clams	1.2%	1.2%	1.2%	0.0%	1.2%	0.0
Razor clams	1.7%	1.4%	1.4%	0.3%	0.3%	0.0
Unknown clams	5.5%	3.9%	3.4%	2.9%	2.2%	0.1
Unknown cockles	1.2%	1.2%	1.2%	0.0%	1.2%	0.0
Dungeness crab	1.0%	0.0%	0.0%	1.0%	0.0%	0.0
Hair crab	1.0%	0.5%	0.5%	0.5%	0.5%	0.0
King crab	13.8%	2.8%	2.7%	12.0%	3.2%	0.7
Blue king crab	18.7%	14.0%	12.1%	11.2%	9.5%	0.7
Red king crab	1.9%	0.9%	0.0%	1.9%	0.0%	0.0
Hanasaki crab	3.7%	1.9%	0.0%	3.7%	0.0%	0.0
Unknown tanner crab	2.8%	0.0%	0.0%	2.8%	0.9%	0.0
Unknown crab	2.0%	0.6%	0.4%	1.9%	0.2%	0.0
Unknown mussels	1.4%	1.3%	1.2%	0.2%	0.4%	0.0
Sea anemone	2.8%	1.9%	1.9%	0.9%	0.0%	0.0
Shrimp	1.0%	0.3%	0.3%	0.7%	0.1%	0.0
Snails	1.6%	1.6%	1.6%	0.0%	0.5%	0.0
Unknown marine invertebrates	0.9%	0.6%	0.3%	0.6%	0.0%	0.0

Table D6. Harvest and use characteristics by species, Interior, Alaska.

Resource	Used	Attempted	Harvested	Received	Gave away	Per capita (gpd)
Salmon	81.4%	44.6%	40.9%	59.9%	34.9%	84.5
Chum salmon	31.6%	21.5%	17.5%	18.0%	12.7%	23.4
Coho salmon	31.1%	18.0%	15.7%	18.2%	11.5%	14.6
Chinook salmon	56.9%	32.6%	29.0%	36.7%	23.0%	41.2
Pink salmon	2.3%	1.6%	1.6%	0.7%	0.4%	0.2
Sockeye salmon	22.8%	10.9%	9.4%	15.5%	7.3%	5.0
Landlocked salmon	0.5%	0.5%	0.5%	0.0%	0.0%	0.0
Spawnouts	0.0%	0.0%	0.0%	0.0%	0.0%	0.0
Salmon roe	2.4%	0.0%	0.0%	2.4%	0.0%	0.0
Unknown salmon	4.2%	0.6%	0.2%	3.9%	0.7%	0.2
Non-marine fish	65.9%	52.9%	48.8%	36.8%	26.4%	32.6
Pacific herring	1.2%	0.0%	0.0%	1.2%	0.0%	0.0
Pacific halibut	16.0%	3.1%	2.8%	13.7%	2.0%	1.0
Char	12.5%	0.0%	0.0%	12.5%	0.0%	0.0
Dolly Varden	7.3%	5.9%	5.3%	2.6%	1.6%	0.7
Lake trout	3.7%	3.1%	2.5%	1.2%	0.6%	0.5
Unknown char	7.1%	5.8%	4.9%	2.7%	3.1%	0.7
Arctic grayling	29.8%	25.3%	22.1%	11.5%	7.5%	2.6
Northern pike (small, pickle)	16.4%	16.4%	16.4%	0.0%	9.1%	0.4
Northern pike	29.4%	25.7%	22.5%	10.3%	9.3%	5.0
Sheefish	32.1%	24.1%	21.5%	15.3%	11.1%	7.4
Longnose sucker	1.7%	1.7%	0.5%	1.2%	0.5%	0.2
Cutthroat trout	0.0%	0.5%	0.0%	0.0%	0.0%	0.0
Rainbow trout	4.0%	3.4%	2.8%	1.4%	0.3%	0.3
Unknown trout	0.4%	1.1%	0.0%	0.4%	0.0%	0.0
Broad whitefish	22.3%	15.7%	14.2%	11.2%	8.2%	5.1
Bering cisco	3.2%	2.4%	1.8%	1.8%	1.1%	0.3
Least cisco	5.9%	4.5%	3.5%	2.9%	2.2%	0.8
Humpback whitefish	24.5%	16.9%	15.3%	11.1%	8.9%	8.2
Round whitefish	2.7%	2.6%	2.0%	1.1%	1.1%	0.2
Unknown whitefishes	2.2%	0.9%	0.9%	1.5%	0.7%	0.3
Unknown nonsalmon fish	0.9%	0.5%	0.0%	0.9%	0.0%	0.0
Marine mammals	12.9%	0.0%	0.0%	12.9%	2.7%	0.0
Bearded seal	1.0%	0.0%	0.0%	1.0%	0.2%	0.0
Fur seal	0.0%	0.0%	0.0%	0.0%	0.0%	0.0
Fur seal (other)	0.0%	0.0%	0.0%	0.0%	0.0%	0.0
Harbor seal	0.8%	0.0%	0.0%	0.8%	0.0%	0.0
Ringed seal	0.0%	0.0%	0.0%	0.0%	0.0%	0.0
Unknown seal	8.7%	0.0%	0.0%	8.7%	1.3%	0.0
Sea otter	0.0%	0.0%	0.0%	0.0%	0.0%	0.0
Steller sea lion	0.0%	0.0%	0.0%	0.0%	0.0%	0.0
Walrus	0.0%	0.0%	0.0%	0.0%	0.0%	0.0
Beluga whale	6.9%	0.0%	0.0%	6.9%	1.3%	0.0
Bowhead whale	5.3%	0.0%	0.0%	5.3%	1.6%	0.0
Unknown whale	6.4%	0.0%	0.0%	6.4%	1.3%	0.0

- Continued -

Table D6, continued. Harvest and use characteristics by species, Interior, Alaska.

Resource	Used	Attempted	Harvested	Received	Gave away	Per capita (gpd)
Marine invertebrates	6.0%	1.6%	1.3%	5.1%	0.9%	0.2
Abalone	1.2%	0.0%	0.0%	1.2%	0.0%	0.0
Butter clams	0.5%	0.5%	0.5%	0.0%	0.0%	0.0
Freshwater clams	0.4%	0.0%	0.0%	0.4%	0.0%	0.0
Pinkneck clams	0.8%	0.8%	0.8%	0.8%	0.0%	0.0
Razor clams	2.0%	1.0%	0.7%	1.5%	0.5%	0.1
Unknown clams	1.6%	0.4%	0.4%	1.2%	0.3%	0.0
Crabs	1.1%	0.0%	0.0%	1.1%	0.0%	0.0
Dungeness crab	0.6%	0.0%	0.0%	0.6%	0.0%	0.0
King crab	1.6%	0.0%	0.0%	1.6%	0.0%	0.0
Blue king crab	1.3%	0.0%	0.0%	1.3%	1.3%	0.0
Tanner crab, opillio	0.9%	0.0%	0.0%	0.9%	0.0%	0.0
Unknown tanner crab	0.6%	0.4%	0.2%	0.4%	0.1%	0.0
Unknown crab	0.4%	0.0%	0.0%	0.4%	0.0%	0.0
Unknown mussels	0.3%	0.3%	0.3%	0.0%	0.0%	0.0
Octopus	0.5%	0.5%	0.5%	0.0%	0.0%	0.0
Oyster	1.4%	0.0%	0.0%	1.4%	0.0%	0.0
Unknown scallops	1.4%	0.0%	0.0%	1.4%	0.0%	0.0
Shrimp	1.9%	0.1%	0.1%	1.9%	0.3%	0.0
Squid	0.0%	0.0%	0.0%	0.0%	0.0%	0.0
Unknown marine invertebrates	0.0%	0.0%	0.0%	0.0%	0.0%	0.0